



EVIDENCE APPENDIX

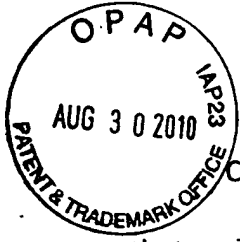
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RELATED PROCEEDINGS APPENDIX

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APPENDIX OF APPEALED CLAIMS



Claim 1. A method for forming, in a production line, profiles (50) with a cross-section that varies along the length thereof, said profiles being formed from a plane metal strip (10) that is unwound from a coil (9), said method employing edge cutters (14) and a plurality of roll-forming units (17-24), the edge cutters and the roll-forming units being individually displaceable sideways relative to the strip,

the steps of said method comprising:

controlling the edge cutters along a first pair of opposed curved lines (51, 52) to sever opposed edges of said strip as said strip moves along the production line to provide the strip with curved opposed edges;

thereafter controlling the roll-forming units along a second pair of opposed curved lines (53, 56) for forming a first pair of corners (53, 56) defining opposed flanges (79, 80) to each side of the center of said metal strip (10) as said strip moves through a first roll-forming section of said production line, and

thereafter controlling the roll-forming units along a third pair of opposed curved lines (54, 58) for forming a second pair of corners (54, 58) defining opposed sides (77,78) to each

side of the center of said metal strip between said first corners, after said first corners have been formed , as said strip moves through a second roll-forming section of the production line,

wherein the curvatures of the first, second, and third pairs of opposed curved lines vary the cross section of the profile formed from the strip along the length thereof.

Claim 2. The method according to claim 1, further including the steps of cutting a transverse slit (61, 62) in the strip (10) before forming the first and second corners, without fully severing the strip, and severing the strip with a terminal cutter (30) after the first and second corners are formed to remove a trailing end from the length of said profile formed from the strip.

Claim 3. The method according to claim 2, in which the lengths of the profile formed have different widths of extent at opposed ends of said profile, the steps of said method including adjusting the width of the strip between one slit (60) that defines the trailing end of the length of one said profile, cutting a further slit (61) to define a leading end of the length of a subsequent said profile, and thereafter cutting the strip at both said slits with the terminal cutter (30).

Claim 4. The method according to claim 1, further including the steps of thinning a portion of the profile by a pair of rollers (83, 85; 84, 82) for bending the profile as said profile is fed forwards in the production line.

Claim 5. The method according to claim 4, further including the steps of controlling the bending of the profile by varying a gap between said pair of rollers (83, 85; 84, 82) through which said profile passes as the profile (50) is fed forwards in the production line.

Claim 6. The method according to claim 4, further including the steps of forming the profile (50) with a central flange (76) and flanking pieces (77, 79) as the strip (10) is fed forwards in the production line, and thinning one end of each said flanking piece by rolling.

Claim 7. The method according to claim 4, further including the steps of forming the profile (50) with a central flange (76) and flanking pieces (77, 79) as the strip is fed forwards in the production line, and thinning a complete one of said flanking pieces by rolling.

Claim 8. The method according to claim 5, further including the step of controlling the positions of the pair of rollers (83, 85; 84, 82) by the profile.

Claim 13. The method according to claim 5, further including the steps of forming the profile (50) with a central flange (76) and flanking pieces (77, 79) as the strip (10) is fed forwards in the production line, and thinning one end of each said flanking piece by rolling.

Claim 14. The method according to claim 5, further including the steps of forming the profile (50) with a central flange (76) and flanking pieces (77, 79) as the strip is fed forwards in the production line, and thinning a complete one of said flanking pieces by rolling.

Claim 15. The method according to claim 6, further including the step of controlling the positions of the pair of rollers (83, 85; 84, 82) by the profile.

Claim 16. The method according to claim 7, further including the step of controlling the positions of the pair of rollers (83, 85; 84, 82) by the profile.

Claim 17. The method according to claim 13, further including the step of controlling the positions of the pair of rollers (83, 85; 84, 82) by the profile.

Claim 18. The method according to claim 14, further including the step of controlling the positions of the pair of rollers (83, 85; 84, 82) by the profile.